Although some aspects of the study of geography are common across a large number of countries, nevertheless a marked ‘geography of geographies’ has emerged since the Second World War. Until then, there was considerable common ground based in geography as the study of areal differentiation – or chorology; it described and provided accounts for inter-regional differences in environments, human activities, and the interactions between the two. The widely-adopted foundations for such an approach were laid down by German and French geographers – with a major American defence of that approach published in 1939 (Hartshorne, 1939; see also Hartshorne, 1959; Entrikin and Brunn, 1990). Those foundations were rapidly eroded in the Anglophone world during the immediate post-war decades. Human geography in the UK, the USA and most of the former British Empire took a new path and contacts with practices in other language realms declined. Several decades of relative isolation stimulated considerable concerns from geographers in non-English-speaking countries regarding a perceived Anglo-American imperialist hegemony over disciplinary changes (on which see Harris, 2001). Those debates lie outside the scope of this brief essay, however, which focuses on changing practices within Anglo-American human geography only.

Contemporary Anglo-American human geography is almost unrecognisable from what comprised the discipline sixty years ago. In the first two post-Second World War decades, few human geographers identified themselves as social scientists: their somewhat small and introverted discipline’s strongest external links were with geology, history and, in a few places, anthropology. Similarly, few members of other disciplines considered geography to fall within the social scientific orbit. Although there are still some lingering doubts as to whether their discipline is a social science (exemplified by the lack of any coverage of links between geography and sociology in Halsey and Runciman, 2006), however, there is now general acceptance among human geographers that the great majority of its practitioners are correctly situated in the social sciences. That was resisted in the 1960s by some UK geographers – who identified firmly with the pre-war humanities tradition – when their discipline belatedly obtained recognition by and entry to the UK’s Social Science Research 

---

1 My thanks to Alec Murphy for valuable comments on a draft of this essay.
Council (Chisholm, 2001; Johnston, 2004b). Similar cases had to be made in the USA (Taaffe, 1970) alongside arguments stressing the discipline’s scientific credentials to the scientific community more generally, recognising the more centralised structure of the academy there (NAS/NRC, 1965, 1997); in most US universities with academic structures separating out the sciences, humanities, and social sciences, geography is now located within last of those three divisions.

The institutional context

Understanding human geography’s growing pluralism, especially since the 1970s, requires appreciating not just the wider post-war intellectual milieux but also particular institutional settings. As an academic discipline, geography is a late nineteenth and early twentieth century creation, preceding the institutionalisation of several other social sciences. Geography as a subject is very much older than that, however, and geographical material was being taught at the UK’s ancient universities for much of the modern period – albeit not necessarily identified as geography per se (Withers and Mayhew, 2002; Livingstone, 2003). The Royal Geographical Society (RGS) was founded in the 1830s to promote geography in the widest sense, and comparable societies were established in several provincial cities – mainly to sustain commercial interests – in the subsequent fifty years, alongside similar societies in the US and elsewhere (the American Geographical Society – AGS – was established in 1851).

Many contemporary disciplines have been created by individuals/groups promoting a new research agenda, usually by ‘breaking away’ from a ‘parent discipline’. In the UK, however, geography was largely created to meet a perceived teaching need. In the mid-19th century, RGS officers became concerned with the quality of geography teaching in secondary (mainly public – i.e. private) schools, and commissioned a report which would draw international comparisons. This provided material used to press for more, and more rigorous, geographical teaching throughout the school curriculum focused on the emerging grammar schools. Geography lacked status and credibility within educational circles because it was not taught at the ‘ancient’ English universities of Cambridge and Oxford, however, so the RGS began a campaign to get it taught there, providing funds which sustained the staffing for several decades (Scargill, 1976; Stoddart, 1986). A diploma course for intending school teachers was provided, alongside – at Oxford – very large and successful summer schools for those already teaching geography who wanted a formal qualification in the subject.

Full degree schemes were not established at Oxford and Cambridge until the 1930s, by which time small geography departments offering honours degrees were available at several other universities (Slater, 1988). Many originated in a demand for ‘service teaching’, providing geographical material for degrees in, for example, economics, history and geology. Most soon found a rationale in the preparation of grammar school teachers, for whom there was a continuing demand because of successful campaigns winning a substantial place for geography in school curricula and the relevant public examination systems; these were led by the Geographical Association, established in 1893 to promote geography teaching (Balchin, 1993); it remains a potent disciplinary lobbyist – not least in the post-1988 debates over a national curriculum (Rawling, 2001; Walford, 2001). The interaction between schools and
universities sustained the subject in both places, ensuring a continual flow of students to the small university departments.

By 1939 there was a small geography department, headed by a professor, in almost all UK universities and university colleges. These prospered in the first post-war decades with the increased flow of students wanting to study a subject they enjoyed at school which offered clear career opportunities – not only in school teaching but also the burgeoning profession of town and country planning. But geography’s status was not high in some institutions as research became more important in universities’ missions and individual academics’ career trajectories (Johnston, 2003a). Geography struggled for several decades to establish a viable, recognised research-based foundation. For most practitioners (and many others outwith the discipline) its rationale remained the study of regions, synthesising material on the natural environment (some drawn from other disciplines and some from specialist studies by physical geographers) with that on human occupancy (Wooldridge and East, 1958). The goal was to depict different assemblages of physical and human features – at a range of spatial scales – comprising a mosaic of milieux with their own genres de vie. To many outwith the discipline – and increasingly some within (see David, 1959) – this was not a rigorous scientific practice. Geography was tolerated in the universities because it could attract students and ‘pay its way’ (something that still characterises the discipline), but it was not seen as a major research discipline. A learned society – the Institute of British Geographers (IBG) – was founded in 1933 to promote the academic practitioners’ interests (many of whom – especially human geographers – felt that the RGS largely ignored their work: Steel, 1983). It launched a serial (Transactions) at the outset, which only published occasional monographs and didn’t become a regular journal carrying papers until the 1950s. Research was not a high priority among the country’s geographers – perhaps one reason why none were elected to the British Academy until 1967 (a historical geographer, Clifford Darby, was the first).

The situation was very different in the United States, where geography did not establish a secure foundation in high school curricula and – in part because of the lack of political activity by leading geographers – was outflanked by the development of social studies in the early-twentieth century (Schulten, 2001). At the same time, the National Geographic Society, through its highly-successful monthly National Geographic, presented a widely-adopted view of geography which stressed the representation of exotic places. There was some demand for universities and normal schools to train geographers to become school teachers but the lack of a separate geography stream in the country’s high school systems meant that this was relatively slight: geography might have been a subject that more generalist social studies teachers were expected to cover, but not a discipline requiring specialist teachers with university-level qualifications. Some small university geography departments were established to provide service teaching to undergraduates in other disciplines and a number – as at Berkeley, Clark and Chicago – instituted graduate schools; the discipline only established a narrow foothold in the Ivy League institutions, however, and just one – at Dartmouth – survived into the 1990s. The graduate schools were sustained by the provision of large, introductory undergraduate classes to students.

2 Harvard did have a Laboratory for Computer Graphics and Spatial Analysis headed in the late 1970s by a geographer (Brian Berry, who had been appointed a professor of city and regional planning). A Center for Geographic Analysis was opened there in 2006, providing a ‘technology program in the Institute for Quantitative Social Science’
almost all of whom lacked any background in the subject, and there were very few geography majors.

The presence of a small number of graduate programmes stimulated the creation of a professional learned society – the Association of American Geographers (AAG) – founded to promote geographical research, not least through its *Annals*. (The AGS was significantly restructured at about the same time, with its journal – *The Geographical Review* – also adopting a research focus.) One of the discipline’s most active promoters then, and first AAG President, was William Morris Davis, initially trained as a scientist and engineer at Harvard, and later as a geologist, who was appointed a full professor of physical geography there in 1890. Alongside his massive geomorphological research contributions he did much to promote geography as the study of environment-society interactions (Chorley, Beckinsale and Dunn, 1973), although in other hands this became translated into a naïve determinism and geography – as in the UK – failed, despite the work of some others, to gain equal status with other research-based disciplines; geographical research as practised by AAG members became marginalized by the National Geographical Society and other influential organisations (Schulten, 2001; Poole, 2004).

The emphasis on interaction between humans and their physical environments in the British conception of geography points to a crucial feature of the intellectual context there. All UK university geography departments, to a greater or lesser extent, include both physical and human geographers, the former practising as natural/earth scientists. In the early twentieth century, most physical geographers were also ‘regional specialists’, teaching about areal differentiation in one part of the world. From the 1950s on, their specialist interests – notably in geomorphology (the study of landforms and land-forming processes), but also in biogeography and climatology – came to predominate. As a result, and as human geographers too deserted the regional focus, the two ‘halves’ of geography have become more separate activities, with distinct sets of practices. Nevertheless, for political reasons at least the two have remained together institutionally, offering students courses in both social and natural science approaches to the discipline (with most allowing later specialisation in one or the other). The consequences of this togetherness for the development of each are difficult to unravel (given the absence of a counterfactual case), but there can be little doubt that it was crucial in the 1960s-1970s in the development of quantitative methodologies for spatial analysis and has sustained work on society-nature interactions.

This physical-human symbiosis was less apparent in US universities, especially during the period when areal differentiation held sway as the discipline’s raison d’être; many adopted the stance advanced by Hartshorne (1939) and others that while this called for descriptive accounts of the physical environment, research into, for example, landform creation was not needed (see also some of the essays in James and Jones, 1954). As a result, geography departments rarely encouraged research in physical geography and some excluded it (the University of Washington still does); a commemorative volume for the 75th anniversary of the AAG had no specific physical geography contributions (on which see Marcus, 1979). From the 1980s on this rift was healed, in part responding to increasing concern over human-nature interactions,

---

3 He was also president of the American Geological Society.
and most university departments now include physical geography, but it generally lacks the status sustained and enhanced in the UK over the last 60 years.

Until the 1960s/1970s, geographers had few contacts with the burgeoning social sciences – the relatively ‘new’ disciplines of politics and sociology as well as the longer-established fields of economics and anthropology. (Exceptions include the links with anthropology at Berkeley in the US, led by Carl Sauer; the foundation chair at Aberystwyth in the UK, first held by H. J. Fleure, is in geography and anthropology.) Geography was for example largely ignored by the ‘new universities’ established in the UK in the late 1950s, where the social sciences flourished (Johnston, 2004a). The discipline continued to expand very substantially where it was already well-established in UK universities, however, and suffered less than some other natural and social science disciplines which experienced downturns in popularity during subsequent decades. Similarly in the USA geography was not perceived as a key discipline in either form of science. Indeed, it is absent from a significant number of US universities and relatively small in other institutions when compared with the three core social sciences, but it is large in absolute terms and had big graduate schools before comparators were established in the UK. In the 1960s-1970s many British students went to North America to do a PhD. Some stayed; others returned and had a substantial impact on the British departments which appointed them. Increasingly UK geographers made regular trips to the USA: a contingent of several hundred can usually be found at the AAG’s annual conference, for example. The discipline has become very much an Anglo-American construct (though with important differences: Johnston and Sidaway, 2004b, 2007; Murphy, 2007): to some extent geographers on the two sides of the Atlantic have drifted apart as fewer UK students cross the Atlantic for graduate work, although this has been more than compensated for as easier transport and communications links have brought them closer together.

Five tumultuous decades

Until the early 1960s, change in geographical practices was slow and slight, linked, for example, to developments in cartography and the discipline’s core tool – the map. But foundations were being laid for a subsequent ‘revolution’. The regional focus predominated in most department’s teaching portfolios but physical geographers were developing specialist research agenda linked to work in geology and other natural sciences. There was less movement in human geography, however, although with some marked exceptions. Historical geography (emphasising landscape change, led by scholars such as Clifford Darby in the UK: Darby, 2002; Prince, 2000) was one of the largest ‘specialist’ interests and some places developed particular niches based on links to anthropology – notably at Aberystwyth in the UK and in the ‘Berkeley School’ developed by the highly-influential Carl Sauer (Leighly, 1963): the interests of scholars such as Darby and Sauer in various aspects of landscape change were brought together in a major Wenner-Gren symposium on ‘Man’s role in changing the face of the earth’ (Thomas, 1956). There was little economic geography beyond descriptive studies of, for example, resource availability and manufacturing activities, however, and virtually no study of towns or of social geography; political geography

---

4 That symposium was updated – and its contents illustrate geographers’ continued interest in landscape change – in Turner et al. (1990)
was somewhat discouraged because of perceived links to the Nazi practice of *geopolitik* (Agnew, 2002).

As what one leading geographer referred to as ‘the highest form of the geographer’s art’ (Hart, 1982), regional geography predominated until the 1950s – especially among human geographers. For some critics, their works were little more than catalogues in prose form, mapping areas on major thematic variables (such as climate and soils), dividing them into regions with similar characteristics – usually based on their physical environments – and then providing descriptive accounts of each region’s particular features (what Gould, 1979, 139, called ‘banal, factual boxes’): little attention was paid to the local cultural milieux, what Vidal de la Blache (1911) termed their *genres de vie* in his classic work on French rural *pays*. But others, by ‘adopting a foreign land’ and immersing themselves in it, were able to deploy the regional approach to illuminate life and lives in their selected area (on which see Mead, 2007).

*The first ‘new geography’*

A so-called ‘theoretical and quantitative revolution’ was launched in the late 1950s, although as with so many revolutions earlier indicators can be found (as in Ullman, 1941, and Harris and Ullman, 1945). It had three salient characteristics. The first was the need for *rigour in description*, particularly quantitative description – empirical statements should be replicable and unambiguous (Cole, 1969). A pioneering text on statistical methods was written by a British climatologist (Gregory, 1963) and a specialist study group on Quantitative Methods was established within the IBG in the mid-1960s, but by then the use of statistical procedures had been widely promoted for a decade among US geographers.

The second key characteristic was the *search for spatial order*, for underlying principles not only in the operation of the physical processes studied by geographers interested in landscapes and the natural environment but also in the spatial patterning of human occupancy of the earth’s surface (see Johnston, 2003b). In the USA the dominant centre for this re-orientation was at the University of Washington, Seattle, based around two key individuals. Edward Ullman was one of a large number of geographers recruited by the OSS in Washington DC during the war, where they worked in inter-disciplinary teams (Barnes, 2005, 2006; Barnes and Farrish, 2007). He and a few others realised that their discipline lacked core principles and an adherence to scientific procedures that could produce generalised, applicable knowledge rather than detailed information about unique places. He wrote about models of the distribution of urban settlements and their internal structures, developing an approach to human geography around principles of spatial interaction, based on the key variable of transport and communications costs (Ullman, 1941,

---

5 I was an undergraduate at the University of Manchester, 1959-1962 – a large department with eleven staff and an intake to the honours school of 48. There were specialist courses in geomorphology, biogeography and climatology in the second year (all compulsory) but only in historical geography within human geography. There were compulsory regional courses in both second and third years (Great Britain and Ireland in the former; Western Europe in the latter) plus a range of regional options and something of a rag-bag of other ‘specialist courses’ (history of geography; applied geography). Although a ‘revolution’ was already being fomented across the Atlantic and could be accessed through some journals, it had no impact on the Manchester department then – or many others.
A group of graduate students – quickly known as the space cadets – went to work with him at Seattle, but found greater inspiration from another faculty member – William Garrison – who taught pioneering courses on location theory and statistical analysis (gaining some of his stimuli from parallel developments in the earth sciences that were being adopted by some physical geographers). The group he mentored rapidly spread the new ideas into other graduate schools, and from there – via visiting students – to the UK.

A separate node for similar developments – lagging those in the USA by a few years – emerged at the University of Cambridge with two young academics at its heart: one was a physical geographer, Dick Chorley, who was strongly influenced by those bringing the hypothetico-deductive method associated with systems thinking to geomorphology when doing graduate work in geology in New York; the other was a human geographer, Peter Haggett, who, although he specialised in geomorphology as an undergraduate and some of his early research was in biogeography, spent the decade 1955-1965 developing a course of lectures which became an influential text on *Locational analysis in human geography* (Haggett, 1965). Chorley and Haggett and a growing range of contributors also promoted this ‘new geography’ to schoolteachers through a series of summer schools, leading to major edited volumes that became important university texts (Chorley and Haggett, 1965, 1967). Haggett moved to Bristol in 1966, establishing another ‘pole of development’ there, and graduates from the two universities rapidly ‘colonised’ the discipline as more departments embraced the need to teach and research in this ‘new geography’ – albeit somewhat grudgingly in the case of some senior staff: adherents to the ‘new’ were welcomed but few members of the ‘older generation’ were fully converted to the cause (Johnston, 1978, 2003b; Taylor, 1976).

Much impetus to work on spatial order came from outwith the discipline, and the bibliography to Haggett’s 1965 book illustrates how much he drew on work by economic theorists such as von Thünen, Hoover, Lösch, and Weber and sociologists such as Zipf and Stouffer. Papers by the Seattle ‘space cadets’ and others illustrated the technical inspiration gained from other disciplines, adopting methods from psychometrics, biometrics, sociometrics, and econometrics, for example, as well as from the earth sciences. There were two main exceptions of endogenous developments, however. ‘Central place theory’ is an idealisation of settlement patterns produced by a German geographer – Christaller (1933) – which assumes rational economic behaviour by both service providers and their customers, deducing that this results in hierarchical arrangements of settlements of various sizes serving hexagonal market areas: it had little impact until taken up at Seattle in the mid-1950s. The spatial diffusion of innovations was the subject of pioneer studies by Swedish geographer Torsten Hägerstrand (1953). His detailed studies of migration identified a ‘distance-decay’ pattern in that and other interactions – as indeed contemporaneously did sociologists and ‘social physicists’ – but his work had little impact on Anglo-American human geography until he visited Seattle in the later 1950s (Duncan, 1974; Morrill, 2005). The space cadets who took up these and other ideas and techniques stressed their applied value, exemplified by a wide range of studies pioneered by one
of them – Brian Berry – at the University of Chicago in the 1960s and 1970s (Yeates, 2001).

The impact of these ideas launched on a largely-unsuspecting geographical community in the mid-1960s was massive and rapid – and also traumatic. Some established figures in the discipline were reluctant to embrace such a major change its rejection of the regional approach. Pressures to accommodate new ways of thinking were strong, however, and in a period of expansion it was not long before most departments contained at least one practitioner of the ‘new human geography’. Teaching practices were very substantially altered: compulsory courses in statistics became de rigueur, accompanied in some by parallel courses in computer use and programming (see Whitehand, 1970; Lavalle, McConnell and Brown, 1967).

This rapidly-named ‘new geography’ had a third key characteristic, introducing students not just to procedures associated with the hypothetico-deductive ‘scientific method’ but also to aspects of the philosophy of science. The key book was Harvey’s (1969) *Explanation in geography* which emphasised rigorous methodology exemplified by mathematical reasoning and statistical analysis. Human geography was to become a spatial science.

The foundations laid down by these pioneers have endured, although contemporary practices are very different from the originals. In statistical analysis, for example, by the end of the 1960s, researchers – particularly Haggett and his Bristol colleagues – had identified major problems applying standard techniques from the general linear model to spatial data, because of biases in coefficients and their error terms introduced by spatial autocorrelation (an extension to two dimensions of the one-dimensional temporal autocorrelation of such importance in econometrics). Development of valid spatial analytical tools was initiated and continues in the rapidly-expanding field of spatial econometrics and ‘local statistics’, with a growing number of researchers across the social sciences appreciating the need for such an approach (Anselin et al, 2004). In this, as in so much else, change has not only been facilitated but in some cases made possible by developments in computing technology. Spatial statistical analysis is now an extremely sophisticated activity.

One aspect of computing technology fundamental to much of this development is the creation of geographical information systems (GIS) – combined computer hardware and software for the capture, storage, checking, integration, manipulation, display and analysis of spatially-referenced data (Longley et al, 1999, 2001). GIS integrate data that can be ‘mapped’ (in the widest sense of that term), providing a technology which is at the core of developments in spatial analysis across many disciplines as well as an enabling technology for a wide range of service industries – and the potential for contract work by geographers (Longley and Clarke, 1995). This has stimulated the growth of Geographical Information Science (GISc) with geography at the fore – and, in the USA more than the UK, a key rationale for the academic discipline’s financial survival (see Murphy, 2007).

---

6 There is a strong tradition of work in ‘applied geography’, although its nature has changed very substantially since the early books by Stevens (1921) and Stamp – one of the discipline’s pioneers in the UK who served on a number of important government committees in the 1940s-1950s – were published (Stamp, 1960). On Stamp see Embleton and Coppock (1968).
The nature of the theory driving spatial analysis has also changed. It was soon realised that most models of economically-rational behaviour based on *homo economicus* were too unrealistic to be applied to contemporary behavioural patterns – increasingly so, because they incorporated strong assumptions that distance (reflecting the time and cost involved in crossing it) was a major constraint to spatial behaviour. An alternative behavioural geography was formulated, which sought regularities in rigorous but more inductive ways – teasing out patterns within the context of general theories of how people make decisions in and about space (see Golledge and Stimson, 1997).

In the early years of this ‘new geography’ many research papers tested theoretically-derived hypotheses. A large number investigated aspects of spatial form – analysing point and line patterns and various surfaces (as synthesised in Berry and Marble, 1968) – whereas others studied spatial patterns of human behaviour in the context of, for example, ‘gravity models’ applied to migration patterns and the diffusion of diseases. As the location theories which provided the original stimuli declined in popularity, increasing attention was given to other forms of behaviour – looking, for example, at the characteristics of different types of social area within a city and how these provided contexts for behavioural variations in such aspects as health and voting, and using techniques from the developing field of spatial econometrics (in many cases within GIS frameworks) to evaluate the mapped spatial patterns. Place rather than space became the leitmotif: rather than focus on ordered patterns which could be mapped (or maps that could be deconstructed as representations of spatial order), human geographers moved to study spatially-varying contexts and their influence on behaviour patterns. Economic theories never entirely disappeared, but were more sophisticated in their treatment of behavioural patterns (as, for example, recent work on ‘evolutionary economic geography’: Boschma and Martin, 2007).

Geographers, on the other hand, distanced themselves from the ‘new economic geography’ launched by Paul Krugman and others in the 1990s, claiming that this bore too close a resemblance in its assumptions regarding economic behaviour to the discredited theories that characterised the early years of geography’s ‘quantitative and theoretical revolution’ (Martin, 1999).

The ‘radicals’ arrive

No sooner had human geographers accommodated changes in research and teaching practices induced by the ‘quantitative revolution’ than a new ‘would-be revolution’ arrived. This was partly a product of social unrest focused on American concerns about the Vietnam War but also covered issues such as social and economic inequality, poverty and civil rights. It stimulated negative reactions to spatial science, arguing that its descriptions and attempted ‘explanations’ of spatial patterns and behaviour were largely irrelevant to such major concerns, having little to offer those who wished to tackle – rather than just ameliorate – such problems and create a more just and equal society. The alternative offered was Marxism.

A pioneer of this approach was David Harvey, who had been at the forefront of the previous revolution and was now in the vanguard of the next. His essays in *Social justice and the city* (1973) galvanised postgraduates and young academics, not only with excoriating views on approaches he advanced a few years earlier but also his promotion of a Marxist (or historical-materialist) approach. While Harvey supported
and was personally involved in local political campaigns he stressed the importance of a deep grounding in Marx’s thinking and dialectic methods. Capitalism had to be understood theoretically and he extended Marxian thinking by incorporating a spatial element – most notably in *The limits to capital* (1982) and works on urbanization (e.g. Harvey, 1985a).

This ‘radical revolution’ stimulated some to abandon human geography as a spatial science but its influence on the discipline differed from its predecessor’s. Some ‘radicals’ were appointed to geography departments and introduced courses/research that broadened their portfolios, but this was not widespread – certainly nothing like the rapid and deep spread of ‘quantification’. In part this reflected the context. British universities in particular were contracting and losing staff in the 1970s-1980s and many lacked space for individuals promoting the new approach – especially as they were also being pressed to become more commercially-minded rather than critical of the apparatus of capitalism and the contemporary state. There was no take-over.

There was, however, a broad acceptance of the radicals’ case that studying capitalism’s superstructure – the spatial patterns of settlements and individual behaviour within them, for example – offered neither a full appreciation of its underpinnings (the so-called infrastructure) nor tools to do other than manipulate that superstructure. Fundamental problems of inequality could not be addressed within geographers’ largely descriptive paradigm, however quantitatively rigorous. Few established academics embraced Marxism fully (in part, perhaps more so in the USA, because of rhetorical links between Marxism and the ‘cold war’), let alone associated reform agendas, but recognised the argument that ‘real explanation’ required more than a distance-decay regression equation.

Further impetus toward this appreciation came from two directions. The first was Derek Gregory’s (1978) classic, *Ideology, science and human geography*, which introduced the discipline to a wide literature in the philosophy of science, social science and the humanities, focusing attention on the role of human agency in the continuous re-creation of structures (including spatial structures) – what later became known through Giddens’ (1984) work as structuration. Andrew Sayer’s (1984) *Method in social science: a realist approach* broadened the agenda by setting the base-superstructure-infrastructure model in a wider, not-necessarily-Marxist context. Such books and subsequent debates resulted in a more philosophically-aware human geography, which distanced itself from the geometrical determinism of some forms of spatial science and the economic determinism of some forms of Marxism by stimulating awareness of spatially-varying structure-agency interactions as people made their own histories and geographies but not in circumstances of their own choosing. Place was again replacing space as geographers’ leitmotif through this re-orientation of human geographical work: Harvey, for example, built space into Marx’s basic arguments regarding capitalist dynamics – not only through his major theoretical essays on movements of capital and their geopolitical consequences (Harvey 1982, 1985b) but also his interpretations of late capitalism and neoliberalism (Harvey, 2003, 2007); Massey’s (1984; Massey and Meegan, 1982) empirical studies set the changing geography of British manufacturing employment during the recession of the 1970s-1980s into a clear Marxist/realist framework, showing how a decline in profitability both constrained locational choices and yet at the same time offered restructuring organisations a range of spatial opportunities.
A further ‘radical’ agenda reflected an inequality within geography itself as well as society more widely. Feminism’s arrival within human geography focused initially on the small number of women geographers and the discipline’s institutionalised patriarchy (Rose, 1993), as well as the invisibility of women in so much geographical scholarship. The agenda – led by a Women and Geography Study Group established within the IBG in the early 1980s, which produced a collective text on *Geography and gender: an introduction to feminist geography* (1984) – soon broadened, however, drawing on a wide range of inter-disciplinary sources concerned with difference, positionality and the politics thereof (a switch reviewed in McDowell, 1993a, 1993b). This informed not only a growing volume of work in feminist geography – and a significant change in the composition of the academic discipline – but also wider concerns with the politics of difference applied to other marginalized groups. The feminist impulse also introduced human geographers to a wider range of cultural theory than heretofore encountered.

*Followed by the ‘cultural turn’*

From the late 1980s on, growing appreciation, and participation in the development, of cultural theory added a further major strand to human geography’s portfolio. It was not the first attempt to promote the role of individual agency. Alongside the ‘radical revolution’ a small number of dissenting voices criticised both spatial science for denying individual free will in a form of spatial (or geometrical) determinism and Marxism for privileging economic imperatives. A range of philosophies – such as phenomenology, idealism and existentialism – was explored. None achieved more than a token following but the basic point was appreciated, even if largely unrealised until the ‘cultural turn’ a decade or so later. Increasingly, geographers acknowledged the importance of constrained free-will within structural imperatives, which were themselves changing markedly as capitalism was being reworked through globalisation and neo-liberalism.

The change was initiated in the late 1980s in a small number of departments (especially in the UK at first, where there was greater freedom for academics and their students to experiment relatively unconstrained by financial imperatives). It came to the fore in the early 1990s as the ‘cultural turn’, drawing much inspiration from the burgeoning multi-disciplinary enterprise of cultural studies. It emphasised hybridity, seeking to break down barriers between different ‘types’ of geography – economic, social, political, urban etc – through an awareness that common human traits and behaviour patterns (‘culture’) underpin most (if not all areas) of life and are inscribed in spatial structures which constrain and yet facilitate further action.\(^7\)

One particular impetus for a substantial number of human geographers was post-modernism and its stresses on heterogeneity, particularity and uniqueness. This was expressed in work which (at least implicitly) respected arguments derived from Marxist, realist and structurationist scholars but distanced itself – often aggressively so – from spatial science. The latter was seen as failing to ‘to take seriously the complexity of human beings as creative individuals’ (Cloke et al, 1991, 17), with

---

\(^7\) One attempt, using citations, to explore the interactions among the discipline’s various branches – which suggests relatively little success at breaking down the barriers – is Sluyter et al (2007)
behavioural geographers restricting themselves to ‘a fairly narrow conception of how human beings think and act’ (p. 67). Instead, geographers were offered a range of approaches which, according to a major introductory textbook promoting the genre: … avoids the easy and ultimately dull options of retreating into worlds of compiled fact or modelled fantasy. It engages with real life and real lives, embracing their wonderful complexity. It seeks to do more than record or model; it tries to explain, understand, question, interpret and maybe even improve these human geographies (Cloke et al, 1999, p. ix) focused, according to a parallel book (Cloke et al, 2004, 283), on describing and explicating the ‘meaningful nature of life’.

Such arguments challenged much that continued to be done within human geography, especially within spatial science and GISc, creating deep breaches that facilitated some portraits of the discipline as irrevocably split. Others have been at least partly reconciled with the ‘cultural turn’, as in Harvey’s (1989) interpretation of societal and economic change since the 1970s within his firmly-held Marxist approach, in the major thrust within economic geography involved with understanding new forms of capitalism associated with globalised neo-liberalism and economic regulation, and in the appearance of a structurally-based critical human geography emphasising the ‘ought’ as much as the ‘is’, concerned with ethics and justice (Harvey, 1996; Smith, 1994). But the challenge has gone much further, with geographers addressing material way beyond previous agenda – as in feminist-inspired studies of the body, of sexuality, and of children’s geographies – and much rethinking about the relationships between humans and not only nature – as illustrated by the burgeoning field of political ecology (Robbins, 2004) – but also a wide range of other ‘things’, such as texts.

Geographers’ focus on subjectivity and the social construction of knowledge is grounded by stressing the crucial role of place (at a range of spatial scales, a concept of much contemporary concern) as where identities are created and re-created and political strategies enacted. There is talk of this stimulating a wider ‘spatial turn’ within the humanities and some social sciences reflecting appreciation of the key concept of place in the constitution of society. Space and place have been introduced to subjects and narratives which, according to geographical protagonists, have been for too long dominated by time: geography and history should run in parallel (if not interweave), rather than the latter being privileged.

Inspiration has also been drawn from post-structuralism, emphasising language, texts, discourse and power. Drawing on stimuli such as French philosophers and social scientists Foucault, Derrida, Deleuze and Latour, this emphasises problematics involved in representing empirical worlds (not only worlds of ‘things’ but also non-representational worlds of, for example, emotion and affect). Writing and other textual forms (including geographers’ traditional medium, the map; see Olsson, 2007), as well non-textual representations (such as landscapes) reflect the author’s positionality, and their interpretation reflects the readers’. The transmission of ‘facts’ and meanings is thus unstable as texts are constructed and deconstructed in spatial contexts.

This approach is illustrated work on geopolitics, notably Gregory’s (2004) *The colonial present*, which deals with the contemporary conflicts in Afghanistan, Iraq
and Israel-Palestine and is much influenced by Edward Said’s work on the (re)presentation of ‘others’. Its theme stressing the role of political power in creating, maintaining and challenging such representations characterises critical geopolitics with its emphasis on the role of asymmetric cultural creations in international relations. The book also provides an intriguing counterpoint to a Marxist-inspired interpretation of much of the same subject-matter in Harvey’s discussion of The new imperialism (2003).

The difference between approaches influenced by the ‘cultural turn’ and earlier work characteristic of the ‘quantitative revolution’ has been sharply drawn in Barnes’s (2004) comparison of studies in economic geography – what he terms ‘the 1960s science of space versus the millennial culture of place’. The major shift, he suggests, was ‘from abstract spaces to concrete places’: whereas a characteristic paper in the 1960s used regression analysis to test hypotheses regarding central place patterns in part of Iowa (Berry and Barnum, 1962), one from the 1990s on workers in the City of London’s financial markets stressed the cultural performances in their working practices – what they wore, how they spoke, how they held their bodies (McDowell, 1997). Under spatial science, he argues,

… the intent is to deploy formal transformations that render all places comparable, to turn them into one continuous homogeneous space that is mathematically tractable, and hence explainable by abstract logic

whereas

… the cultural turn is about keeping places intact, not transforming them into a theoretical calculus, but working away at their contingent concreteness, materiality and singularity …

The ‘cultural turn’ has altered human geography at least as much in the last twenty years as quantification did between 1960 and 1980. Much of this reflects the power of the ideas and their attractiveness to new generations of scholars (relatively few adherents of more ‘traditional’ views have been ‘converted’), but the rate and extent of change has been facilitated by the changed academic environment. Universities have expanded rapidly in the UK since 1988 and more recently in the USA, and (many) geography departments have enjoyed the fruits of this growth (albeit constrained by financial circumstances, which have not expanded to the same extent); they have been able to attract students, many of whom in the UK then discover that they have enrolled into a very different discipline from that studied in school. Operation of intra-disciplinary politics has enabled geographers associated with the ‘cultural turn’ to capture a significant proportion of the discipline’s available resources – such as new/replacement staff positions – and rewrite undergraduate curricula to emphasise their practices (Johnston, 2006). This has not gone unchallenged in some departments, or in the discipline more widely: spatial science and/or GIS remain strong contenders for disciplinary resources (Jackson et al, 2006). But just as the discipline in 1975 bore little resemblance to that of 1945 or 1955, so the discipline in 2005 is different again.

Putting it all together?

This review of changes in human geography over six decades has stressed issues of geographical practice – what geographers do – rather than changes in geographical knowledge – what geographers study and how their knowledge is used. Not
surprisingly, changing practices have been linked to changing subject matter, as illustrated here – although, as often claimed, the key geographical concepts of space, place, scale and environment have remained at the discipline’s core.

Changes in geographical knowledge have involved both a broadening and a deepening of disciplinary content. Clearly defined subdisciplines were few in the first 10-20 years of the period; most practitioners identified themselves simply as human geographers, usually with a regional specialism. By the late 1970s, although there was still some teaching in a regional context, few identified a regional specialism as the main focus of their research. Instead, there were economic geographers and social geographers, urban geographers, industrial geographers and transport geographers, resource geographers – even quantitative geographers. In the UK few were called cultural geographers until the 1990s, however, the term being generally associated with the school of human-environment studies founded by Carl Sauer at the University of California, Berkeley, in the 1920s-1930s. From then on, many more identified themselves as cultural geographers, but the intra-disciplinary boundaries became less rigid.

Human geographers are sometimes placed in just two main groups – spatial analysts and social theorists (Sheppard, 1995). Although an over-simplistic binary split, this emphasises the main difference in their dominant practices – quantitative vs qualitative. Although some individuals practice on both sides of the divide – either in different substantive areas of study or by successfully deploying elements of both sets – nevertheless this clear distinction can be found throughout the contemporary discipline, including the practices emphasised in some departments and their teaching programmes.

The presence of two sets of distinctive portfolios of geographical practices in the contemporary discipline indicates that – as in other social sciences – the changes that have occurred in human geography do not conform to Kuhn’s model of normal science interrupted by occasional revolutions. None of the attempted ‘revolutions’ has been totally successful in eliminating previous practices (although some, like ‘traditional’ regional geography, slowly disappeared as their adherents retired from the scene). Instead, they have increased the range of work and fostered a wide portfolio of (sometimes ill-defined) sub-disciplines: geography is, and has been since at least the early-1960s, multi-paradigmatic, at every scale of that concept.

The two major changes in human geography since 1945, in terms of volumetric contribution to the discipline’s portfolio, occurred during periods of university growth; new practices could be more readily incorporated when more students were being recruited and more staff appointed. This may have been a necessary condition for change, but certainly not a sufficient one. Those wishing to alter the disciplinary agenda had to convince others of the desirability of adding the new to the old – as a precursor, for some proponents at least, to replacing it and engineering a complete revolution (Johnston, 2006). This political task involving competition for resources provides a further exemplar of structuration processes, of human agency operating within structural and contextual constraints to change those structures. Some agents have been more successful than others; the results show in human geography’s recent history and contemporary situation – and in the variety of practices emphasised within and between institutions.
Geography has a number of traditions which characterise practitioners’ approaches to their discipline, therefore (Livingstone, 1992). Rarely has there been a wide consensus about their relative value, however, and as their breadth has increased in recent years the discipline has become an even more contested enterprise. In this, human geography differs little, if at all, from other social sciences where similar contests are being played out as various academic social movements seek to dominate disciplinary spaces (Frickel and Gross, 2005; Johnston, 2006). That alone does not make human geography a social science, and it is still not recognised as such by all social scientists. Nevertheless, as this essay has shown, English-speaking human geographers on both sides of the Atlantic have adopted and adapted the social sciences’ main precepts over the last six decades; there can be no doubt that they practice as social scientists and that their practices are increasingly recognised, and adopted, by other social scientists.

References


Barnes, T. J. and Farish, M. 2007: Between regions: science, militarism and American geography from world war to cold war. Annals of the Association of American Geographers 97:


Johnston, R. J. and Sidaway, J. D. 2007: Geography in higher education in the UK. *Journal of Geography in Higher Education* 31: 57-80


Murphy, A. B. 2007: Geography’s place in higher education in the USA. *Journal of Geography in Higher Education* 31: 121-141.


Stevens, A. 1921: *Applied geography.* Glasgow: Blackie.


Thomas, W. L., Jr., editor, 1956: *Man’s role in changing the face of the earth.* Chicago: University of Chicago Press.

Turner, B. L., Clark, W. C., Kates, R. W., Richards, J. F., Matthews, J. T. and Meyer, W. B., editors, 1990: *The earth as transformed by human action: global and
regional changes in the biosphere over the past 300 years. Cambridge: Cambridge University Press.


